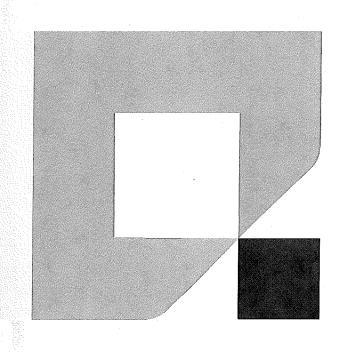
Presentation North Carolina Beach Plan

Presentation to the North Carolina
Legislative Research Commission
Subcommittee on Property Insurance
Ratemaking

March 21, 2012

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Overview of Presentation

- Introduction
- Background
- Overview of Milliman Analysis
- Major Findings
- Beach Plan exposure
- Comparison with Prior Report
- North Carolina rate level
- Potential impacts on NC insurance industry
- Conclusions
- Limitations



Introduction

- Beach Plan Analysis for PCI
- 0 Conducted by Milliman - Independent actuarial consulting
- Purpose and Scope
- Analyze the impact of HB 1305 on Beach Plan funding of Property insurance industry hurricane exposures and the residual exposure to the NC
- Analyze the overall Beach Plan exposure and the effect of North Carolina's rate level
- Basis
- Publicly available data from Beach Plan and other sources.
- 0 Milliman is available to answer any questions regarding the analysis



Introduction

- Prior Milliman Report
- Commissioned by PCI
- Dated October 10, 2008
- Presented to the North Carolina General Assembly on October 16, 2008
- General Results:
- that could result in billions of non-recoupable assessments to Showed Beach Plan was susceptible to severe hurricane events enough to threaten the solvency of smaller insurers voluntary property insurers. These assessments could be large
- using varying assessment bases Showed there was no system in place to finance large surplus deficits and gave examples of the effect of recouping deficits



Introduction

North Carolina House Bill (HB) 1305 – Passed in 2009

- Provisions that affect the Beach Plan's exposure to hurricane loss include:
- Surplus must be retained to maintain Beach Plan operations
- Pay losses
- Purchase reinsurance
- Pay operating expenses
- May not be distributed to member companies
- Minimum named storm deductible for wind and hail coverage of 1%
- Maximum coverage limits of \$750,000 for homeowners and dwelling policies (previously set
- Contents coverage reduced to 40% of building value (previously 70%).
- and hail coverage and 15% for wind and hail as a part of a homeowner's policy. Beach Plan rate level set at 5% above approved voluntary market rates for separate wind
- Beach Plan may institute a Catastrophe Recovery Charge that will apply to all NC property policyholders (including Beach Plan) subject to the following:
- Catastrophe Recovery Charge may only be implemented through the NC Insurance Commissioner.
- Charge may only be proposed once member companies have paid \$1 billion in assessments.
- Charge shall not exceed 10% of the annual policy premium.



Background

North Carolina Beach Plan

- North Carolina Insurance Underwriting Association (NCIUA)
- Formed in 1969 (along with FAIR Plan) to make property insurance the standard insurance market. available to NC residents unable to purchase insurance through
- 0 Available only in the Beach and Coastal areas.
- Ö All P&C insurance companies who do business in North Carolina participate in funding the plan and sharing any losses or profits.
- Deficits must be funded via assessments on insurers and the Catastrophe Recovery Charge
- No mechanism currently exists for insurers to recoup amounts assessed
- The practical implementation, timing, and initial financing of Catastrophe Recovery Charge has not been determined.



Overview of Milliman Analysis

2011 Milliman Analysis

- Update of 2008 Milliman analysis
- 0 Estimate 2011 hurricane losses to Beach Plan under 7 scenarios using RMS catastrophe model.
- 0 Estimate losses retained after reinsurance is applied based on 2011-2012 reinsurance program.
- Project Beach Plan surplus as of September 30, 2011
- 0 Subtract retained hurricane losses from projected surplus to estimate final surplus or deficit
- 0 Estimate impact to voluntary insurers based on current assessment structure as described in HB 1305



Beach Plan Issues

Issues identified in the 2008 Beach Plan analysis:

- Relatively low surplus
- Moderate severity storms would result in deficit.
- Inadequate reinsurance coverage
- Prior coverage was at 1-in-49 year PML with the majority covered by member companies.
- Increasing volume
- From 2004 2008 insured values grew an average of 40% a year
- 0 Unlimited assessments on member companies
- Large assessments could threaten solvency of some insurers



Beach Plan Issues

2009 NC legislation has addressed some major issues:

- Restrictions on distribution of profits to member companies increases available surplus
- Ö Resources available to purchase greater reinsurance coverage
- 0 Coverage restrictions and mandatory deductibles lower modeled PML.
- 0 Limiting coverage amounts to \$750,000 makes some risks ineligible (\$1.5 million limit prior) and further reduces PML.
- Assessments to member companies are now limited

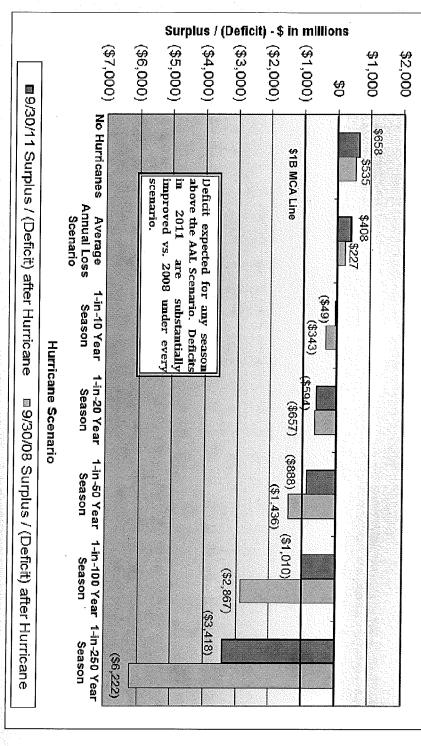
reduced the overall Beach Plan volume, which in 2011 is about 50% of These actions have limited the rate of growth, but have not significantly NC coastal insured value.



Comparison with Prior Report Beach Plan Deficits

Surplus / (Deficit) after Hurricane at Fiscal Year-End 2008 and 2011

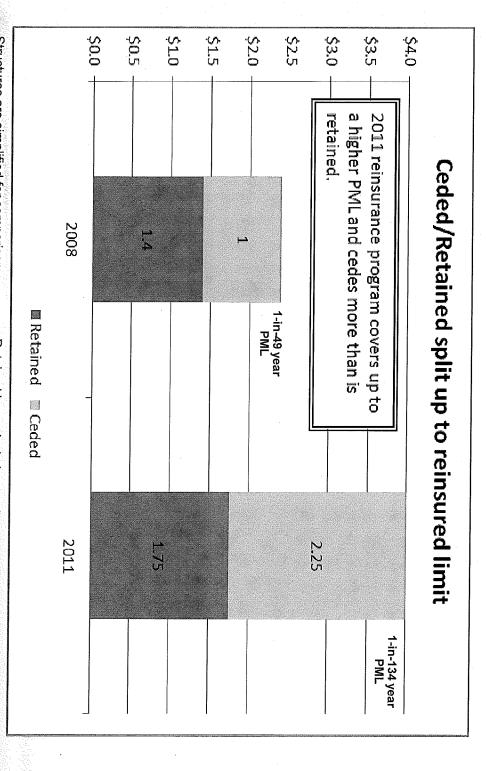
North Carolina Beach Plan



2008 deficits taken from prior Milliman analysis using the 2008 reinsurance program and prior estimates of surplus and hurricane losses 2011 deficits taken from current Milliman analysis using the current reinsurance program and current estimates of surplus and hurricane losses.



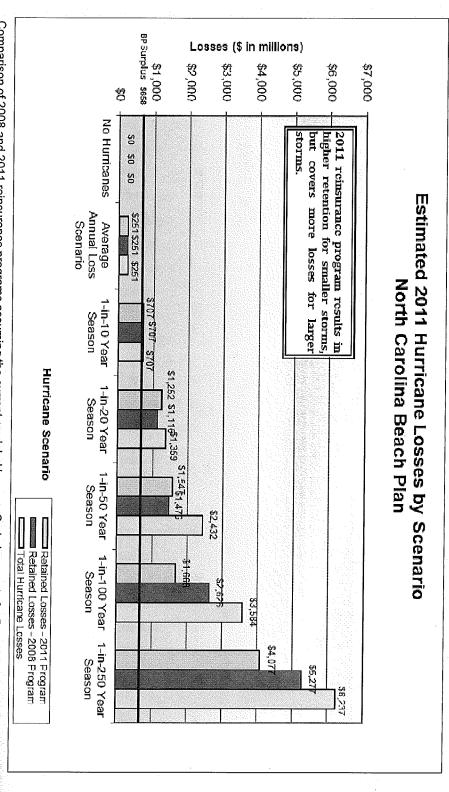
Comparison with Prior Report Reinsurance Program



Structures are simplified for comparison purposes. Retained layers include member company assessments and co-participation.



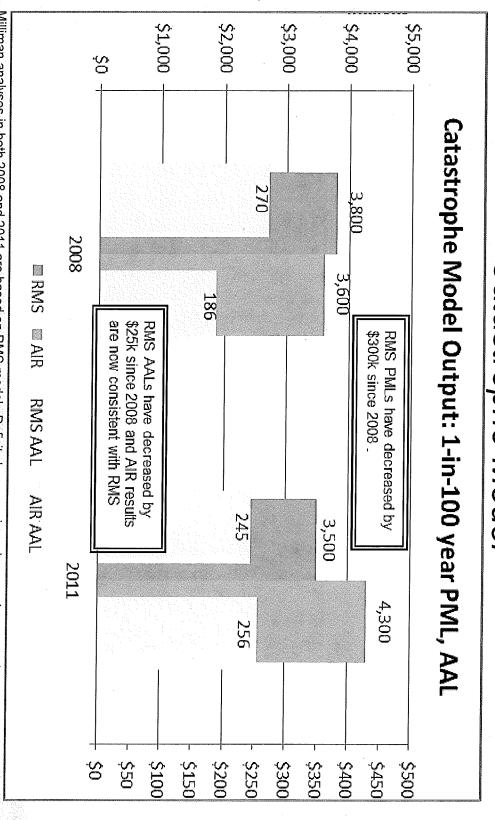
Comparison with Prior Report Reinsurance Program



than the maximum indicated by the reinsurance program which also covers the FAIR Plan. Comparison of 2008 and 2011 reinsurance programs assuming the current modeled losses. Ceded amounts for Beach Plan may be less



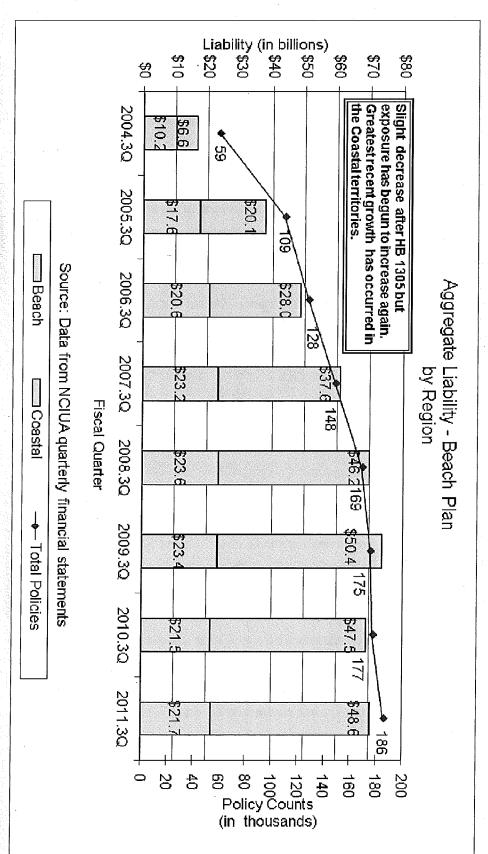
Comparison with Prior Report Catastrophe Model



if based on AIR output. The RMS and AIR model versions were not specified by the Beach Plan. Milliman analyses in both 2008 and 2011 are based on RMS model. Deficits by scenario and comparison over time would be different



Beach Plan Exposure Aggregate Liability





Beach Plan Market Share Homeowners

		Homeowners Direct Written Premium	Direct Written	Premium	Ma	Market Share	
Ran	Rank Company Group	2010	2007	2004	2010	2007	2004
	Total Private & Beach	2,105,449	1,776,342	1,386,932	100.0%	•`	100.0%
	Total Private	1,904,765	1,645,599	1,345,637	90.5%	92.6%	97.0%
<u> </u>	State Farm Mutl Automobile Ins	377,816	314,171	254,736	17.9%	17.7%	18.4%
2	Nationwide Mutual Group	274,058	257,955	223,385	13.0%	14.5%	16.1%
ယ	NC Farm Bureau Mutual Ins Co.	263,888	213,326	173,650	12.5%	12.0%	12.5%
4	NC Beach Plan	200,684	130,743	41,295	9.5%	7.4%	3.0%
رن د	Allstate Corp.	166,028	172,715	130,495	7.9%	9.7%	9.4%
တ	USAA Insurance Group	95,553	80,282	55,686	4.5%	4.5%	4.0%
7	Liberty Mutual	90,893	67,049	53,366	4.3%	3.8%	3.8%
00	Travelers Companies Inc.	89,478	87,326	69,796	4.2%	4.9%	5.0%
9	Erie Insurance Group	81,891	63,021	56,595	3.9%	3.5%	4.1%
10	Auto-Owners Insurance Co.	65,473	54,359	45,780	3.1%	3.1%	3.3%

Notes

- 1. Data from 2004 2010 Annual Statements
- 2. Data includes DWP from the Homeowners Multi-Peril line of business.
- 3. Market Share is measured against the combined private and Beach Plan written premium.



Carolina Rate Bureau (NCRB). (NC DOI) based on industry rate filings submitted by the North Rate level in North Carolina is set by NC Department of Insurance

- In the Beach and Coastal areas, the NC DOI has approved rate changes significantly lower than those indicated or proposed by the NCRB
- areas than in the more inland regions of the state The residual rate indications are far greater in the Beach and Coastal
- 0 One likely driver of high Beach Plan volume is that the rate level in the Beach and Coastal areas is too low for voluntary writers to accept the risk.



North Carolina Rate Bureau

North Carolina Rate Bureau

- Created by the North Carolina General Assembly.
- Promulgates rates for residential property, private passenger auto, worker's compensation, and employer's liability.
- **NCRB** All voluntary insurance carriers are required to be members of the
- Historically, Homeowners and Dwelling filings submitted every few
- policies and 15% above the NCRB rate for full-coverage policies. are set by statute at 5% above the approved NCRB rate for wind-only Beach Plan is not a member of the NCRB; however, Beach Plan rates
- By state statute, NCRB is required to establish Beach and Coastal that are actuarially correct premiums that are commensurate with the risk of loss and premiums territorial definitions so that they can be used to establish Beach Plan



2008 NCRB Homeowners Rate Filing Statistics

							•	
	West	Central	Coastal	Beach				
8,577,577	5,015,356	2,837,443	641,358	83,420	House-years (Note 2)	5-year		(1)
19.5%	8.5%	17.4%	56.7%	39.9%	Change (Note 1)	Level	Indicated	(2)
19.5%	8.5%	17.4%	56.7%	39.9%	Change (Note 1)	Level	Requested	(3)
4.1%	-1.0%	3.7%	20.2%	11.1%	Change (Note 1)	Level	Approved	(4)
14.4%	9.6%	13.2%	30.4%	25.9%	Change (Note 3)	Indicated Level	Residual	(5)
	70.9%		> 29.9%		Average			(6)

were 11% deficient. estimated to be deficient by approximately 30%, whereas rates in the remainder of the state Using NCRB indications, 2008 NCRB approved rates in the Beach and Coastal areas were

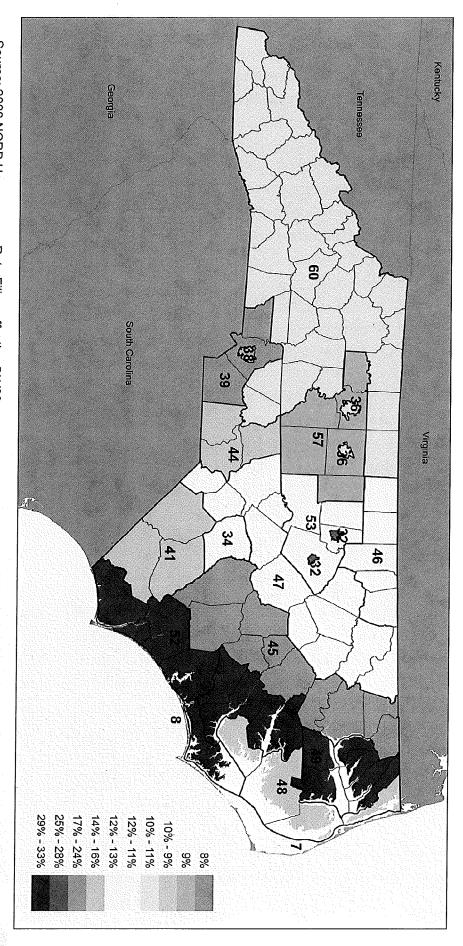
- Data from NCRB's 2008 Homeow ners Rate Filing, effective 5/1/09, w hich is the latest available.
 House years are for the calendar years ending 12/31 for 2001 -2005.
- 3. (5) = [1 + (2)] / [1 + (4)] 1
- 4. Beach: Terr 7, 8

Coastal: Terr 48, 49, 52 Central: Terr 32, 34, 41, 45, 46, 47, 53

West: Terr 36, 38, 39, 44, 57, 60

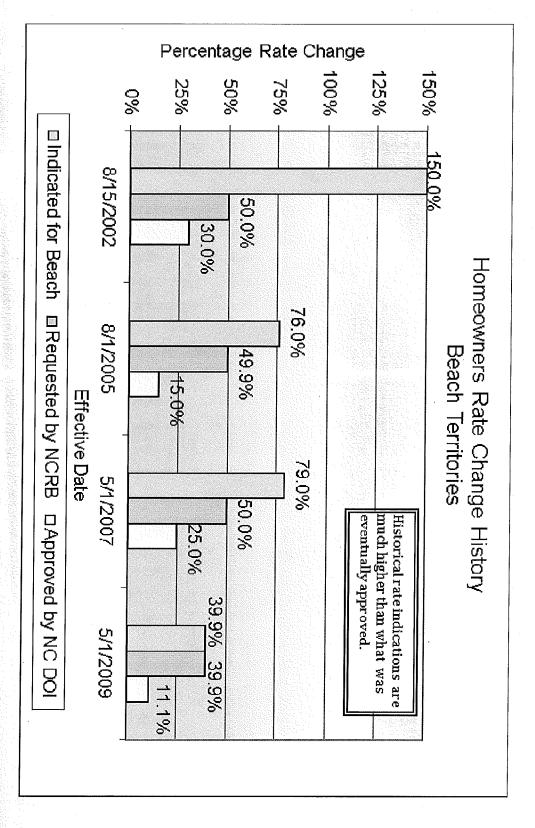


Residual Rate Indication by Territory

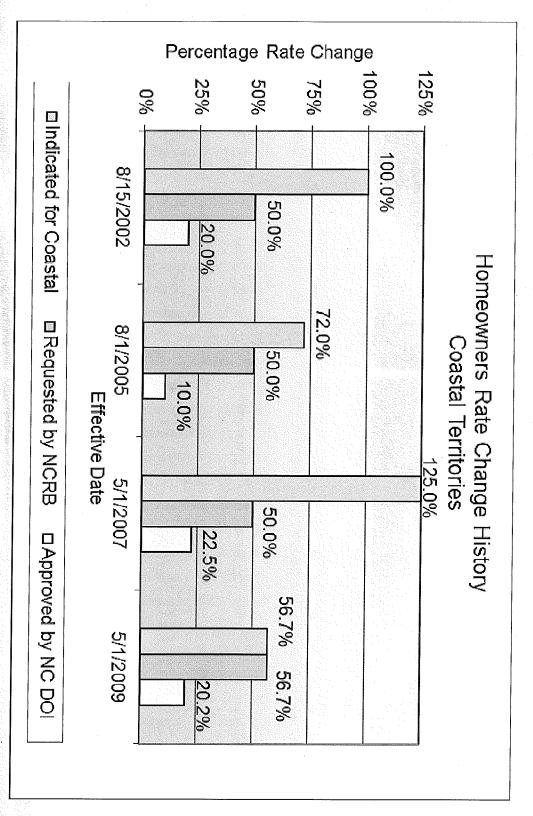


Source: 2008 NCRB Homeowners Rate Filing effective 5/1/09











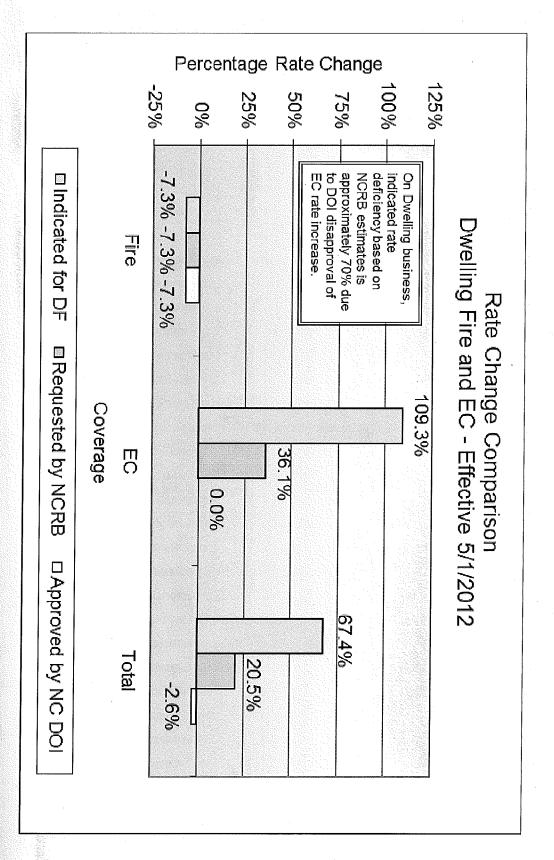
need has likely increased due to: Latest HO rate filing was effective 5/1/2009. Since then rate

- Loss trend of 5 10% a year (based on ISS Fast Track)
- Changes in catastrophe models
- Increased reinsurance costs

received much less than requested from the NC DOI: Recent NCRB Dwelling rate filing, effective 5/1/2012,

- Fire and Extended Coverage (EC) perils analyzed separately
- EC primarily covers losses from windstorms but also covers theft, vandalism, and other miscellaneous perils
- Approved rate decrease proposed for Fire
- Disapproved rate increase proposed for EC







North Carolina Department of Insurance

Department Rate Filing Review

- NCRB Dwelling Fire and EC rate filing, effective 5/1/2012
- From the NC DOI order
- [are] not comparable to the requirements for the voluntary market and would also seem to be irrelevant." voluntary market. Thus, the Beach Plan reinsurance requirements the coast are significantly greater than the exposures of the this case from both parties that the Beach Plan's exposures along the jurisdiction of the Bureau. Moreover, there was evidence in filing which proposes rates for the voluntary market, which is under charges; therefore the Beach Plan program is irrelevant to this Bureau have jurisdiction over the rates that the Beach Plan "....the Beach Plan is not a member of the Bureau nor does the



North Carolina Department of Insurance

Consequences of Department Rate Filing Review

- Ignores statutory connection between NCRB rates and Beach Plan rates
- Economic realities of catastrophic risk and reinsurance cost are not reflected in approved NCRB HO and Dwelling rates
- voluntary market doesn't write in the Beach and Coastal areas voluntary market but NC DOI won't increase rates because "Catch-22" - Rates in Beach and Coastal areas too low for
- greater risk of assessment through the Beach Plan. Resulting imbalance in Beach and Coastal pricing leads to
- Catastrophe Recovery Charge is essentially the subsidization of Beach and Coastal policyholders by inland policyholders



Insurance Industry Effect

actions? NC Farm Bureau Example: How does perceived rate level in North Carolina affect insurer

- About the company:
- Mutual insurer domiciled in NC; incorporated in 1953; rated A by A.M. Best; writes only in NC.
- #3 in NC Homeowners market share in 2010 with \$200 million of HO DWP (12.5% of NC DWP including Beach Plan).
- 0 Announcement (Insurance Journal 12/29/2011)
- NC Farm Bureau will nonrenew up to 28,000 stand alone homeowners policies with recent claims
- additional Homeowners policies unless legislature makes changes that would allow higher rates In addition, NC Farm Bureau is considering nonrenewing up to 70,000
- business The 98,000 policies represent about 20% of NC Farm Bureau's book of



Insurance Industry Effect

NC Farm Bureau Example cont'd:

- Announcement (News & Observer 2/28/12)
- Removing discounts on 382,000 HO policies (avg. 6% rate increase).
- Seeking similar increases for Dwelling policies

Excluding wind damage in 15,000 coastal HO and Dwelling policies

- Company cited increases in reinsurance costs, concerns over low rate level in NC, and threat to financial stability.
- NC DOI quotes
- "We have been hearing from agents that this has been contemplated by other companies.
- "Ultimately these are business decisions that companies are allowed to make."

Another Example (News & Observer 2/28/12):

Allstate (#5 in NC HO market) will nonrenew all NC homeowners policies attributed by the company to concerns over profitability without supporting auto coverage. These underwriting changes are



HB 1305 has led to improvement in Beach Plan:

- Slowed exposure growth
- Increased surplus
- Shifted more risk through reinsurance
- Limited member liability through assessment plan

Beach Plan exposure remains high:

- Covers approximately half of coastal insured property
- At current rate level, private insurers appear unwilling to cover wind exposure in the Beach and Coastal territories
- 0 Moderately severe storms result in Beach Plan deficits
- 0 Beach and Coastal policyholders subsidized by inland policyholders through Catastrophe Recovery Charge
- 0 companies and the policyholders in remainder of state Beach Plan continues to pose significant financial risk to member



- of NC as a whole: NC property writers are signaling concern over profitability
- Rate levels have been suppressed for Homeowners and Dwelling.
- Beach and Coastal areas most underpriced based on rate filings.
- financially stable and fulfill obligations to policyholders Companies must manage their catastrophe risk in order to stay
- Exposure reductions of larger insurers may shift more risk to Beach Plan and smaller insurers
- Chronic underpricing in other states has kept residual market risk unacceptably high

Other issues post HB 1305

- No recoupment mechanism for Beach Plan assessments.
- No facility specified for Beach Plan Catastrophe Recovery Charge.



Actions that could potentially address the issues identified:

- Flex Rating Program: Allow automatically approved deviations within some specified band, such as +/-10%.
- Territorial Deviations: Allow company specific territory definitions with actuarially justified rate deviations.
- reinsurance costs in rates Reinsurance Costs: Enable explicit recognition of
- Net expense: Premium less expected reinsurance recoveries.
- Necessary to increase insurance capacity.
- amount of capital that needs to be held Larger risk margins are needed due to the level of risk and the



- Catastrophe models: Accept catastrophe models for ratemaking purposes
- Models incorporate years of historical hurricane data including frequency, hurricane paths, and property damage
- Developed by experts in meteorology and insurance
- iterations of the model, allowing even companies with low volume Estimate of losses due to hurricanes based on up to a million to achieve credible results
- Ś approval of rate changes due only to the impact of Beach paid by Beach Plan member companies through automatic Beach Plan Assessments: Allow recoupment of \$1 billion Plan assessments
- <u>ე</u> recovery process Establish Catastrophe Recovery Charge bonding and



Limitations

Limitations and Qualifications:

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Limitations

Limitations and Qualifications (continued):

may likewise be inaccurate or incomplete. Data Reliances. In performing this analysis we relied upon data and other information provided to us by information. If the underlying data or information is inaccurate or incomplete, the results of our analysis PCI, the NCIUA and other publicly available sources. We did not audit or verify this data and

detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a detailed review was beyond the scope of our If there are unexplained material defects in the data, it is possible that they would be uncovered by a

available to us, and our professional judgment. Our results reflect assumptions such as catastrophe vary from the projections limitations of the data, actual results will not develop exactly as projected and may, in fact, significantly these assumptions, the effect of other factors such as political and legislative issues, and the inherent projections, policy exposure growth, loss trend, exposure trend, and risk-sharing associated with the Uncertainty. We based our results on generally accepted actuarial procedures, the information NCIUA and the insurance industry. However, due to the uncertainty associated with the estimation of

reinsurance companies were unable to meet their obligations under existing contracts with respect to insurance balances that would become liabilities of the NCIUA in the event that any of the determine the extent of recoverables. We assumed that all reinsurance is valid and collectible. We did accuracy of reinsurance contract provisions provided via publicly available information sources to not examine the various reinsurance contracts to verify the coverage terms. Contingent liability exists Reinsurance. Our projections are provided both gross and net of reinsurance. We relied upon the

